Chempro Pier 91c
WA 2917

METRO
Municipality of Metropolitan Seattle

Exchange Building • 821 Second Ave. • Seattle, WA 98104-1598

6/19/1990

REGISTERED MAIL
RETURN RECEIPT REQUESTED

June 19, 1990

FILE COPY

Sylvia Burges
Environmental Protection Agency
HW 112
1200 Sixth Avenue
Seattle, WA 98101

Pacific Northern Oil Company Permit Application No 7597

Dear Sylvia:

We have received the attached waste discharge permit application from Pacific Northern Oil Company for a groundwater remediation project at their Pier 91 facility in Seattle.

We have determined that due to the nature and size of the discharge, and the potential length of time the project will last, it will be appropriate to issue a waste discharge permit for this project. I will be sending you a copy of the draft permit for your review and comment.

If you have any comments regarding the attached application, please contact me at 684-2378 within fourteen (14) days of receipt of this letter.

Sincerely,

Jacqueline Eden

Jacqueline A. Eden
Industrial Waste Investigator
Comprehensive Planning Division

JAE:mwr
Enclosure

cc: Doug Hilderbrand, Metro
Karen Huber, Metro
Ray Carveth, Metro

JAE2\LS_BPNO90

Waste Discharge Permit Application

RECEIVED
INDUSTRIAL WASTE
APR 26 1990
METRO

Application is hereby made for a permit to discharge wastes into the Municipality of Metropolitan Seattle sewer system in accordance with RCW 90.48.165, RCW 35.58.180, RCW 35.58.200, RCW 35.50.360 and Metro Resolution 3374.

Section A — General Information:

1. Company Name Pacific Northern Oil
2. Mailing Address Suite 1800, 1100 Olive Way, Seattle, Washington 98101
3. Location of plant discharging wastes if different from above Port of Seattle, Terminal 91
4. Name, title, address and telephone number of person to contact concerning information in this questionnaire:

Name George Markwood Title Manager of Terminals & Operations

Address 100 West Harrison Plaza Phone No. (206) 282-4421

City Seattle State Washington Zip 98119

Section B — Product or Service Information:

1. Brief description of manufacturing or service at plant address:

Extraction of groundwater contaminated with diesel fuel will be accomplished with an all pneumatic system capable of pumping total fluids from a 6-inch diameter recovery well.

Topside separation of water and diesel fuel will be accomplished with an oil/water separator. (Please see Exhibit 1)

2. Raw materials and chemicals used in processes:

Brand Name	Chemical, scientific or actual name	*Quantities Average Used per day	Maximum
	Diesel Fuel	6 gal/day	NA

3. Describe how raw chemicals and hazardous materials are stored. Have steps been taken to ensure that spills resulting from accidental spillage or ruptured containers will not enter a waterway or sewer?

Free product and groundwater will be sent through a coalescing phase oil/water separator with a manufacture's guarantee of 15 parts per million or less product concentration in effluent discharge. Recovered product will be stored in double walled containers. All lines from the recovery well into the oil/water separator will be double walled. High ~~water shut off sensors will be installed in the oil/water separator and the product~~ containment system.

4. Products manufactured or processed:

Product	*Quantity and Unit Average	Maximum
1. Diesel Fuel	6 gal/day	
2.		
3.		
4.		
5.		

Section C — Plant Operational Characteristics:

1. Plant Operations:

	Days per year	Number of employees per shift Day	Night	Swing
Average	360	NA	NA	NA
Maximum	360	NA	NA	NA

2. Explain any seasonal variation you may have in waste discharge volumes, plant operations, raw materials and chemicals used in processes and/or production:

No seasonal variations in discharge are expected.

3. Describe in detail the sources of all industrial wastes within your industry. Describe in detail the treatment given each of these wastes. Include in this description the disposal methods used for these wastes and also for any sludge collected by your waste treatment system. Include a schematic flow diagram showing the sources of all wastes and their flow pattern. Include this information with your application as Exhibit 1.

4. Metal finishing and metal etching industries: Give a breakdown of capacity and number of tanks by solution type, concentration and estimated dragout. Identify tanks containing significant quantities of phosphorus, nitrogen, heavy metals, cyanide and etching solutions that concentrate heavy metals. Describe what precautions have been taken to contain and prevent discharge of plating solutions spilled as a result of ruptured or leaking tanks. Include this information with your application as Exhibit 2.

Section D — Water Consumption and Loss:

1. Source of supply Groundwater from extraction well

2. List water consumption within the plant:

	Average gallon/day	Maximum gallon/day
a. Industrial processing	NA	NA
b. Cooling	NA	NA
c. Boiler feed	NA	NA
d. Water incorporated into product	NA	NA
e. Other (specify)	NA	NA

Raw water treatment (specify water conditioning chemicals used) NA

3. List discharge or water losses to:

	Average gallon/day	Maximum gallon/day
a. Municipal sewer (industrial and sanitary wastewater)	7,200	14,400
b. Surface waters and storm sewers (specify)	NA	NA
c. Waste haulers	6	12
d. Evaporation	NA	NA

4. Describe all wastewater treatment equipment or processes in use: Phase Coalescing Oil/Water Separator

5. Planned waste treatment improvements should be submitted on a separate sheet as Exhibit 3. Describe any additional treatment or changes in waste disposal methods in planning or under construction.

6. Give any additional information or comments you feel necessary to clarify this application as Exhibit 3. Include all information for previous questions, where additional space is necessary, as part of Exhibit 3.

7. The information given on this application is correct and accurate to the best of my knowledge.

Signature

Scott H. Clark
Printed Name

April 25, 1990
Date

Executive Vice-President
Title

*Please specify units. For example: tons/day, pounds/day, barrels/day, etc.

EXHIBIT 1

Site characterization studies have estimated that 1,370 gallons of diesel fuel in the free product phase is present on the groundwater surface at the area under investigation at Terminal 91. A groundwater remediation system consisting of a pneumatic pumping system plumbed into a coalescing phase oil/water separator with a manufacturer's guarantee of 15 parts per million (ppm) or less of total petroleum hydrocarbons (TPH) in the effluent discharge will be installed as a means of recovering free product from the groundwater surface.

It is estimated that the discharge rate from the extraction well will be 5 gallons per minute. Approximately 6 gallons per day of free product is anticipated to be recovered with an average of 7,200 gallons per day of treated effluent discharged into the Metro sanitary sewer. Recovered product will be contained in a double-walled containment system and recycled by Pacific Northern Oil or transported to an off-site recycling center on a monthly basis.

N

0 50 Feet
Scale

Monitoring Well (typical)

MW-104

MW-101

Fuel Tank Farm

West Garfield Street

Guard Station

Transformer

Metro Sewer
Treated Effluent
Discharge

MW-2

Product Containment Vessel

MW-6

Oil/Water Separator

Lake Jacobs

Extraction Well
EW-1

MW-3

MW-11

Fence

Short Fill Area

MW-102

Bulkhead

Bulkhead

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Exhibit No. 1
SITE REMEDIATION FLOW CHART
Terminal 91 Remedial Investigation
Pacific Northern Oil

Converse GES